

- 1. A structural wooden joist comprising:
  - a) an elongated lower chord;
- an elongated upper chord in a spaced apart generally parallel opposed relation to said lower chord; and
- c) an openwork web structure joining said chords; said web structure comprising a series of connector members formed of inclined branches and adhesively secured to said lower and upper chords; each said branch of said connector members being formed of at least two planks having contiguous sides adhesively joined to one another; said connector members defining a series of triangular openings in said web structure.
- 2. A structural wooden joist as defined in claim 1, wherein each said opposite ends of said web structure displays a laminated panel; each said laminated panel being formed of a series of elongated vertical planks secured edgewise to one another and having upper and lower sides thereof adhesively joined to said upper and lower chords.
- A structural wooden joist as defined in claim 2, wherein each said connector member at each opposite end of said web structure is adhesively joined to a chord member and to an innermost plank of said laminated panel.
- A structural wooden joist as defined in claim 1, wherein said connector members of said web structure have upper and lower edges secured to said chords by finger joints.
- A structural wooden joist as defined in claim 2, wherein said planks of said connector members and of said laminated panels are glued edgewise to one another.
- A wooden structural joist as defined in claim 1, wherein said web structure further includes a central region free of connector members.

- 7. A structural wooden joist as defined in claim 6, further comprising a laminated panel structure in said central region; said panel structure defining an uninterrupted surface having opposite lower and upper sides adhesively joined to said lower and upper chords respectively; said panel structure of said central region being formed of a series of vertical planks secured edgewise to one another.
- 8. A structural wooden joist as defined in claim 7, wherein said planks are glued edgewise to one another.
- A structural wooden joist as defined in claim 1, wherein said planks are made of kiln dry wood.
- 10. A structural wooden joist as defined in claim 9, wherein said wood is selected from the group including fir, spruce and pine.
- 11. A structural wooden joist as defined in claim 1, wherein fibres in said planks extend in the longitudinal direction of said planks.
- 12. A structural wooden joist as defined in claim 1, wherein each branch of said connector member extends obliquely at about 35° relative to said chords for a joist having a height of about 9.25 inches.
- 13. A structural wooden joist as defined in claim 1, wherein each branch of said connector member extends obliquely at about 42° relative to said chords for a joist having a height of about 11.25 inches.